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云南古蚖属六新种 (原尾纲: 古蚖目)

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摘要: 描述了采自云南的6个古蚖新种: 高黎贡古蚖 *Eosentomon gaoligongense*、怒江古蚖 *E. nujiangense*、紫溪古蚖 *E. zixiensis*、禄劝古蚖 *E. luquanense*、盈江古蚖 *E. yingjiangense* 和瑞丽古蚖 *E. ruiliense*。

关键词: 原尾纲; 古蚖目; 古蚖属; 云南
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本文描述了采自云南中、西部地区的6种古蚖: 高黎贡古蚖 *Eosentomon gaoligongense*、怒江古蚖 *E. nujiangense*、紫溪古蚖 *E. zixiensis*、禄劝古蚖 *E. luquanense*、盈江古蚖 *E. yingjiangense* 和瑞丽古蚖 *E. ruiliense*。模式标本保存于中国科学院上海昆虫研究所。现分别记述如后。

1 高黎贡古蚖, 新种 *Eosentomon gaoligongense* sp. nov. (图1: A~E)

体长990~1 030 μm。头长124~128 μm。假眼卵圆形12.4 μm, 头眼比=10.0~10.3。前跗节长95~99 μm, 爪长18~20 μm。跗爪比=5.0~5.3; 垫爪比=0.9~1.0。背面感觉毛t-1棍棒形, 基端比=1.0; t-2细长; t-3细长, 比t-2短。外侧感觉毛a短棒形, 中间稍粗; c短棒形; b长柳叶形, d长棒形, 顶端超过g的基部; e和g为匙形, f-1小柳叶形, f-2粗短。内侧感觉毛a′长柳叶形, b′-1和b′-2短棒形, c′也是短棒形, 中间稍粗。中跗节长44 μm, 爪长11 μm; 后跗节长57 μm, 爪长13 μm。后胸气孔直径9.3 μm。雌性外生殖器上的头片为鸭头状, 端阴刺尖细。胸、腹部毛序见表1。

表1 高黎贡古蚖毛序表
Table 1 Chaetotaxy of *E. gaoligongense* sp. nov.

	胸部 (thorax)			腹部 (abdomen)									
	I	II	III	I	II~III	IV	V	VI	VII	VIII	IX~X	XI	XII
背面 (dorsal)	4	$\frac{6}{16}$	$\frac{6}{18}$	$\frac{4}{10}$	$\frac{10}{16}$	$\frac{10}{16}$	$\frac{6^{①}}{16}$	$\frac{6^{①}}{16}$	$\frac{6^{①}}{16}$	$\frac{6}{9}$	8	8	9
腹面 (ventral)	$\frac{6-2}{6}$	$\frac{6-2}{6}$	$\frac{8-2}{8}$	$\frac{4}{4}$	$\frac{6}{4}$	$\frac{6}{10}$	$\frac{6}{10}$	$\frac{6}{10}$	$\frac{6}{10}$	$\frac{0}{7}$	4	8	12

①A1, 4, 5。

全模: 1♀, 2♂♂, 云南高黎贡山, 1996-04-29, 谢荣栋和肖宁年采。

高黎贡古蚖 *E. gaoligongense* 的腹部背板V~VII节前排毛序均为A1, 4, 5, 与已知的古蚖都不相同。以产地高黎贡山命名。

2 怒江古蚖, 新种 *Eosentomon nujiangense* sp. nov. (图1: F~J)

体长1 350 μm。头长148 μm, 宽124 μm。假眼卵圆形内有1个小泡16 μm, 头眼比=9.3。前跗节长106 μm, 爪长25 μm。跗爪比=4.2; 垫爪比=0.96。背面感觉毛t-1棍棒形, 基端比=1.1; t-2细长; t-3细长, 顶端可达爪的基部。外侧感觉毛a和c短棒形, 中间稍粗; b长柳叶形, d细短, e和g为匙形, f-1短棒形, f-2短小。内侧感觉毛a′长柳叶形, b′-1和c′细短, 长度与d相近; b′-2细长, 顶端超过c′的基部。中跗节长57 μm, 爪长14 μm; 后跗节长67 μm, 爪长17 μm。后胸气孔直径12.4 μm。

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雌性外生殖器上的头片呈扁鸭头状，端阴刺细长。　胸腹部毛序见表2。

表2　怒江古蚖毛序表

Table 2　Chaetotaxy of *E. nujiangense* sp. nov.

	胸部 (thorax)			腹部 (abdomen)									
	Ⅰ	Ⅱ	Ⅲ	Ⅰ	Ⅱ～Ⅲ	Ⅳ	Ⅴ	Ⅵ	Ⅶ	Ⅷ	Ⅸ～Ⅹ	Ⅺ	Ⅻ
背面 (dorsal)	4	6/16	6/16	4/10	10/16	10/16	6①/16	4②/16	2③/16	6/9	8	8	9
腹面 (ventral)	6－2/6	6－2/6	8－2/8	4/4	6/4	6/10	6/10	6/10	6/10	0/7	4	8	12

①A1,4,5;②A4,5;③A5。

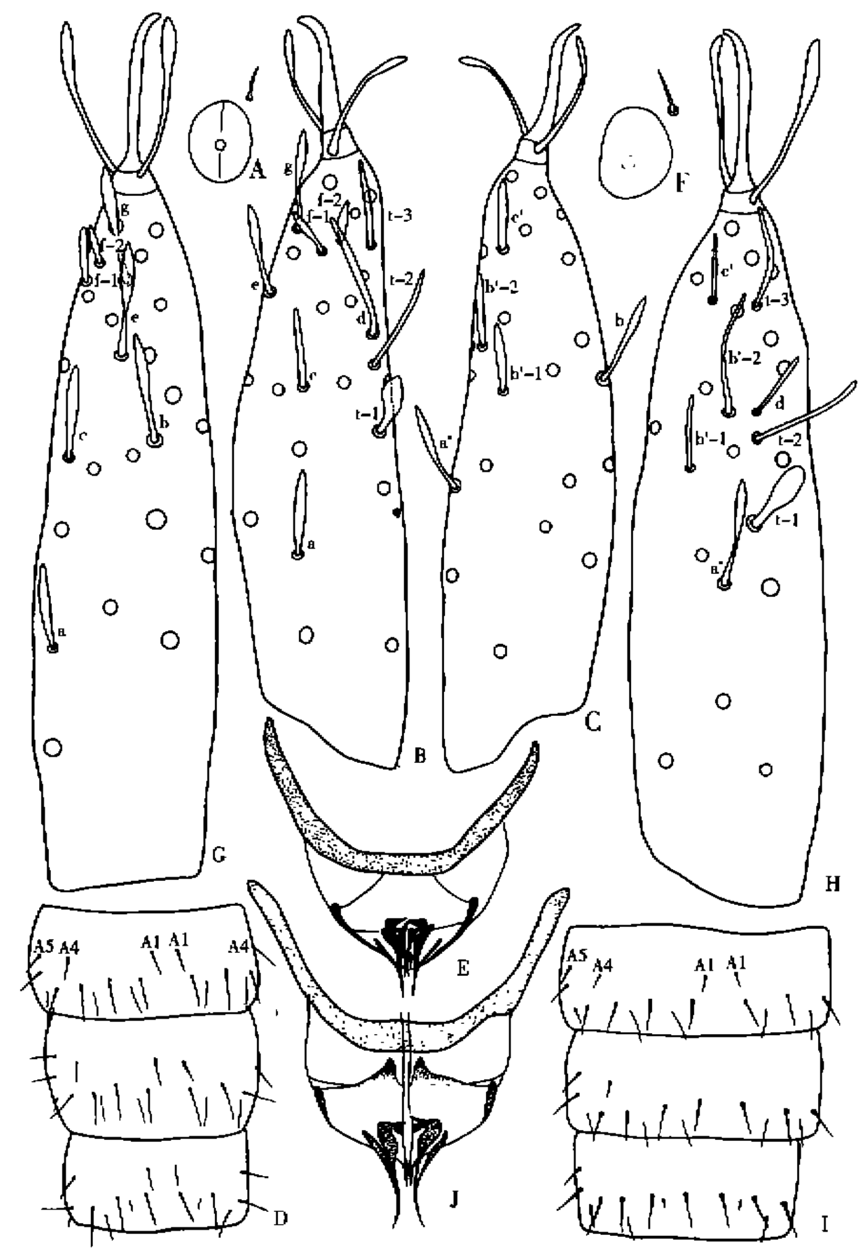


图1　高黎贡古蚖 *E. gaoligongense* sp. nov.（A～E）和怒江古蚖 *E. nujiangense* sp. nov.（F～J）
A. 假眼(pseudoculus);B. 前跗外侧面观(exterior view of foretarsus);C. 前跗内侧面观(interior view of foretarsus);D. 腹部Ⅴ～Ⅶ节背面观(dorsal view of abdomen Ⅴ－Ⅶ);E. 雌性外生殖器(female squama genitalis);F. 假眼(pseudoculus);G. 前跗外侧面观(exterior view of foretarsus);H. 前跗内侧面观(interior view of foretarsus);I. 腹部Ⅴ～Ⅶ节背面观(dorsal view of abdomen Ⅴ－Ⅶ);J. 雌性外生殖器(female squama genitalis)。

正模：1♀，1mj，云南高黎贡山东坡，1996－04－25，谢荣栋和肖宁年采。

怒江古蚖 *E. nujiangense* 腹部背面毛序与版纳古蚖 *E. bannaense* Yin, Xie and Imadaté 1995 相同，但虫体大小相差很大，而且它们的前跗感觉毛 a′、d、t－3 和 f－1 以及雌性外生殖器的头片不同。因采集地紧靠怒江，故以怒江命名。

3 紫溪古蚖，新种 *Eosentomon zixiensis* sp. nov.（图 2：A～E）

体长 780～1 040 μm。头长 113～126 μm。假眼卵圆形内有 3 个小泡和一条直线 10～12 μm。头眼比＝10.5～11.3。前跗节长 86～90 μm，爪长 18 μm，跗爪比＝4.8～5.0；垫爪比＝0.94～1.0。背面感觉毛 t－1 棍棒形，基端比＝0.9～1.0；t－2 细长，t－3 短棒形。外侧感觉毛 a 短棒形，b 细长，c 棒形，长度与 a 相等但明显比 a 粗大；d 细长，顶端刚过 t－3 的基部；e 和 g 为匙形，f－1 细柳叶形，f－2 粗短。内侧感觉毛 a′细长，b′－1 棒形，b′－2 细长，c′比 b′－1 稍粗短。中跗节长 41～45 μm，爪长 12.4 μm；后跗节长 48～57 μm，爪长 13.4～14.4 μm。后胸气孔直径 9.3～10.3 μm。雌性外生殖器上的头片为鸭头形，端阴刺短而尖。胸、腹部毛序见表 3。

表 3 紫溪古蚖毛序表

Table 3 Chaetotaxy of *E. zixiensis* sp. nov.

	胸部（thorax）			腹部（abdomen）										
	I	II	III	I	II～III	IV	V	VI	VII	VIII	IX～X	XI	XII
背面（dorsal）	4	6/16	6/18	4/10	10/16	10/16	6①/16	4②/16	4②/16	6/9	8	8	9
腹面（ventral）	6－2/6	6－2/6	8－2/8	4/4	6/4	6/10	6/10	6/10	6/10	0/7	4	8	12

①A1、4，5；②A4，5。

全模：1♀，云南楚雄紫溪山，1996－05－15，肖宁年采；3♀♀，云南楚雄紫溪山，1996－05－16，肖宁年采。

紫溪古蚖 *E. zixiensis* 腹部背板毛序与产于马来西亚的 *E. pasohense* Imadaté 1976 相同，但雌性外生殖器两者不同。而且它的前跗外侧感觉毛 c 比 a 明显粗大。以产地紫溪山命名。

4 禄劝古蚖，新种 *Eosentomon luquanense* sp. nov.（图 2：F～I）

体长 933 μm。头长 119 μm，宽 95 μm。假眼长 11 μm，头眼比＝10.8。前跗节长 87 μm，爪长 18 μm。跗爪比＝4.8；垫爪比＝1.0。背面感觉毛 t－1 棍棒形，基端比＝1.0；t－2 细小；t－3 粗长，顶端接近爪的基部。外侧感觉毛 a 和 c 相等，均细小；b 细长呈柳叶形，d 棒形，e 和 g 为匙形，f－1 细柳叶形，f－2 短小。内侧感觉毛 a′粗柳叶形，缺 b′－1，b′－2 细小非常短，c′棒形，长度只及 t－3 的一半。中跗节长 41 μm，爪长 11 μm；后跗节长 47 μm，爪长 12 μm。后胸气孔直径 8.2 μm。雌性外生殖器上的头片极细，相向弯曲，端阴刺长而粗。胸、腹部毛序见表 4。

表 4 禄劝古蚖毛序表

Table 4 Chaetotaxy of *E. luquanense* sp. nov.

	胸部（thorax）			腹部（abdomen）										
	I	II	III	I	II～III	IV	V	VI	VII	VIII	IX～X	XI	XII
背面（dorsal）	4	6/16	6/16	4/10	10/16	8①/16	8①/16	8①/16	4②/16	6/9	8	8	9
腹面（ventral）	6－2/6	6－2/6	8－2/8	4/4	6/4	6/10	6/10	6/10	6/10	0/7	4	8	12

①A1，2，4，5；②A4，5。

正模：1♀，云南禄劝转龙，1994－08－20，肖宁年采。

禄劝古蚖 *E. luquanense* 的毛序和雌性外生殖器的头片均不同于已知的其他古蚖，故此定为新种。以产地禄劝命名。

5 盈江古蚖，新种 *Eosentomon yingjiangense* sp. nov.（图 3：A～C）

体长 1 089 μm。头长 115 μm，宽 98 μm。假眼长 15.5 μm。头眼比＝7.4。前跗节长94 μm，爪长

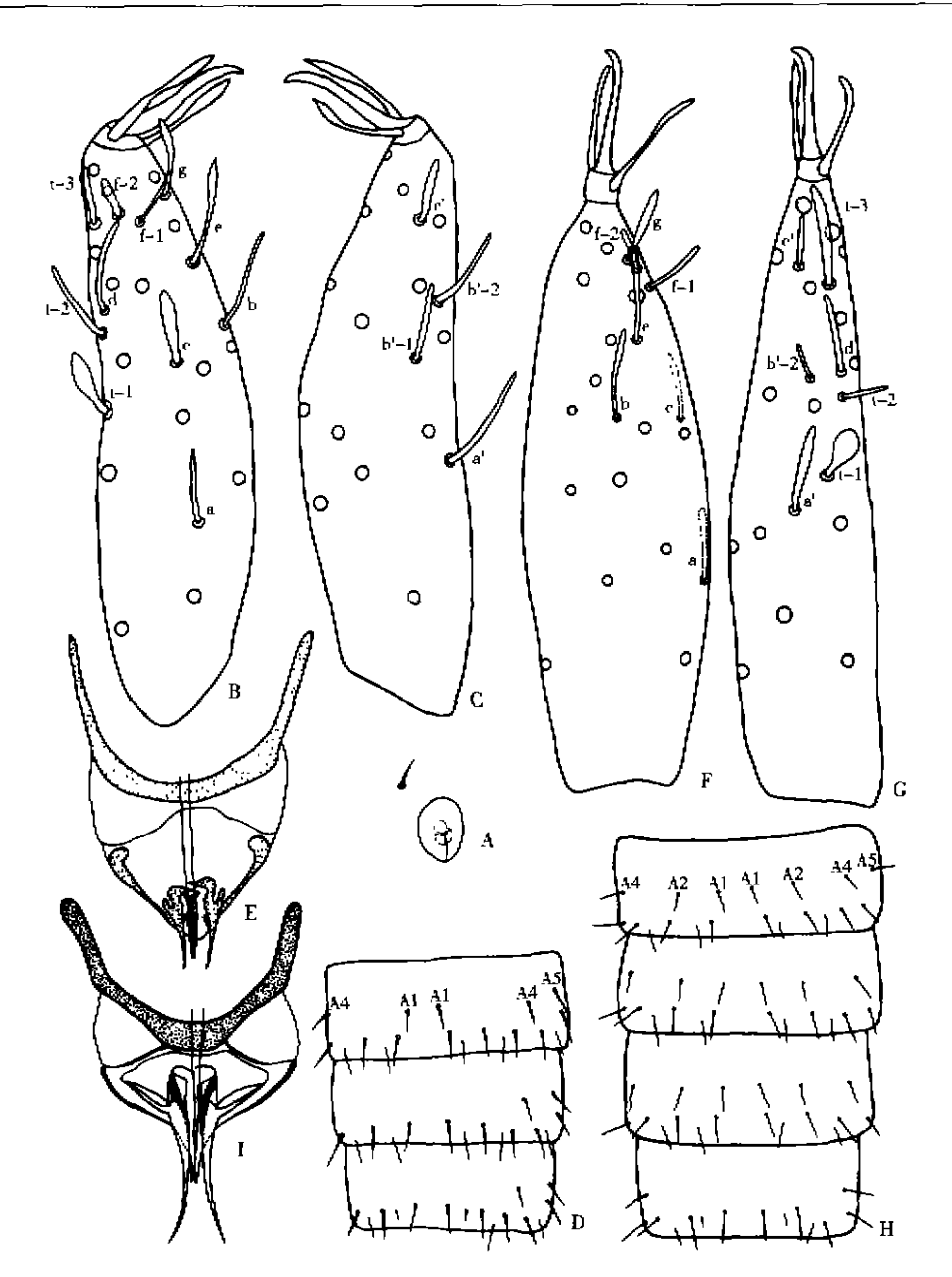


图 2 紫溪古蚖 *E. zixiensis* sp. nov.（A～E）和禄劝古蚖 *E. luquanense* sp. nov.（F～I）
A. 假眼(pseudoculus)；B. 前跗外侧面观(exterior view of foretarsus)；C. 前跗内侧面(interior view of foretarsus)；D. 腹部Ⅴ～Ⅶ节背面观(dorsal view of abdomen Ⅴ－Ⅶ)；E. 雌性外生殖器(female squama genitalis)；F. 前跗外侧面观(exterior view of foretarsus)；G. 前跗内侧面观(interior view of foretarsus)；H. 腹部Ⅳ～Ⅶ节背面观(dorsal view of abdomen Ⅳ－Ⅶ)；I. 雌性外生殖器(female squama genitalis).

21μm，跗爪比＝4.5；垫爪比＝0.95。背面感觉毛t－1棍棒形，基端比＝1.0；t－2细长，顶端超过t－3的基部；t－3粗棒形。外侧感觉毛a和c棒形，长度相等；b细长；d粗棒形，长度刚达t－3的基部；e和g为匙形，f－1柳叶形，f－2短小。内侧感觉毛a'和b'－2均细长，长度与t－2相当，a'顶端可达t－2基部，b'－1缺，c'粗短。中跗节长48 μm，爪长11 μm；后跗节长57 μm，爪长16 μm。后胸气孔直径8.2 μm。胸、腹部毛序见表5。

正模：1♂，云南盈江平原，1992－08－30，肖宁年采。

盈江古蚖 *E. yingjiangense* 腹部背板的前排毛序（Ⅳ～A2，4，5；Ⅴ～A4，5；Ⅵ～A5和Ⅶ～A5）在已知古蚖种类中少见。前跗节内侧感觉毛缺少b'－1。以产地盈江命名。

表 5　盈江古蚖毛序表

Table 5　Chaetotaxy of *E. yingjiangense* sp. nov.

	胸部 (thorax)			腹部 (abdomen)									
	Ⅰ	Ⅱ	Ⅲ	Ⅰ	Ⅱ～Ⅲ	Ⅳ	Ⅴ	Ⅵ	Ⅶ	Ⅷ	Ⅸ～Ⅹ	Ⅺ	Ⅻ
背面 (dorsal)	4	6/16	6/16	4/10	10/16	7①/16	4②/16	2③/16	2②/16④	6/9	8	8	9
腹面 (ventral)	6-2/6	6-2/6	8-2/8	4/4	6/4	6/10	6/10	6/10	6/10	0/7	4	8	12

①左 A2,3,4,5 和右 A2,4,5;②A4,5;③A5;④P1′短，紧靠 P2。

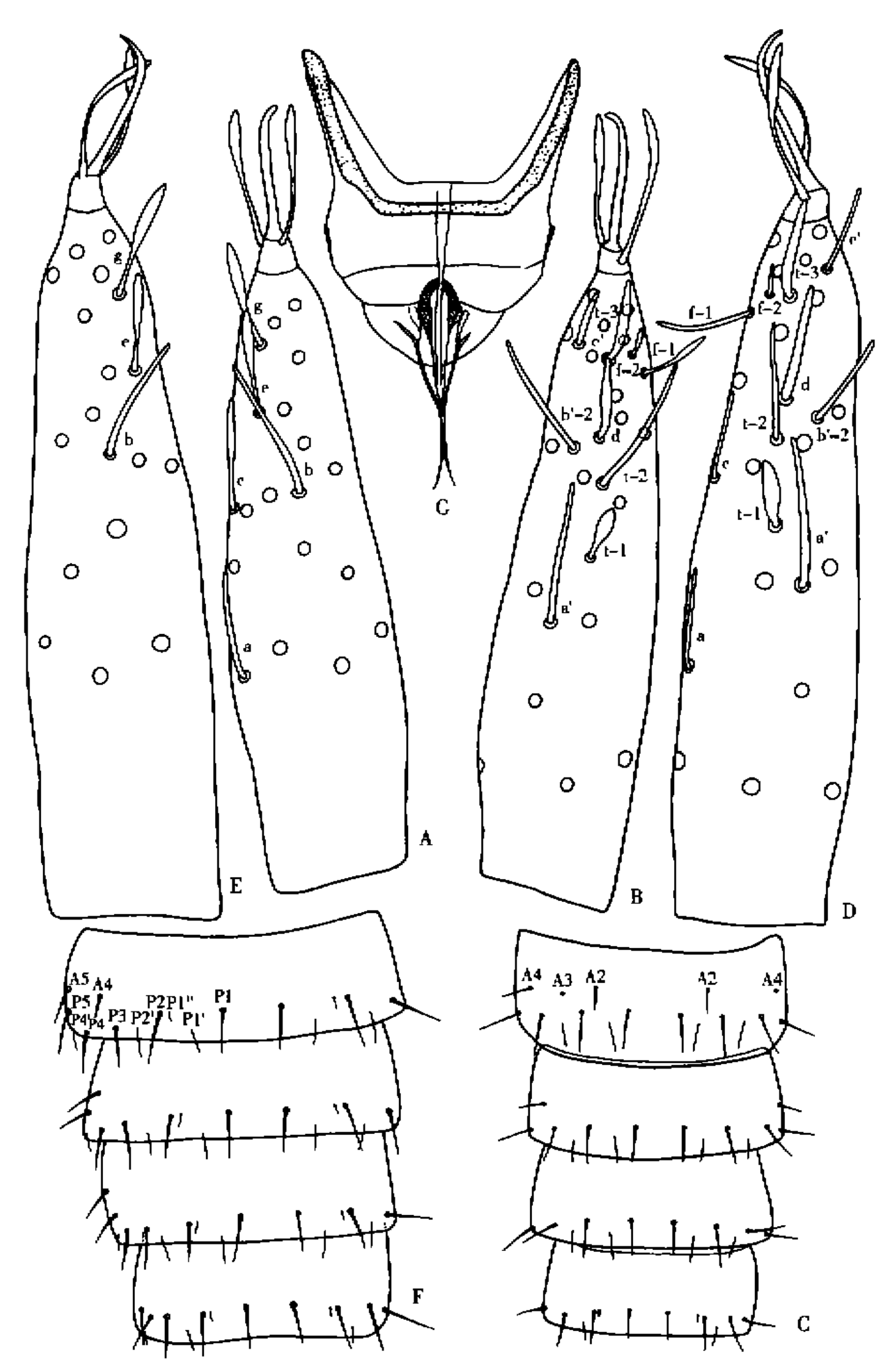


图 3　盈江古蚖 *E. yingjiangense* sp. nov. (A～C) 和瑞丽古蚖 *E. ruiliense* sp. nov. (D～G)

A. 前跗外侧面观(exterior view of foretarsus);B. 前跗内侧面观(interior view of foretarsus);C. 腹部Ⅳ～Ⅶ节背面观(dorsal view of abdomen Ⅳ－Ⅶ);D. 前跗外侧面观(exterior view of foretarsus);E. 前跗内侧面观(interior view of foretarsus);F. 腹部Ⅳ～Ⅶ节背面观(dorsal view of abdomen Ⅳ－Ⅶ);G. 雌性外生殖器(female squama genitalis)。

6　瑞丽古蚖，新种 *Eosentomon ruiliense* sp. nov.（图 3：D～G）

体长 1 058～1 140 μm。头长 134～147 μm，宽 98～114 μm。假眼 18～22 μm，头眼比＝6.2～8.0。前跗节长 103～113 μm，爪长 23～26 μm。跗爪比＝4.3～4.9；垫爪比＝0.9～0.96。背面感觉毛 t－1 棍棒形，基端比＝1.0～1.2；t－2 细长；t－3 粗棒形，顶端接近爪的基部。外侧感觉毛 a 和 c 较细，长度相等，b 细长；d 粗棒形，顶端超过 t－3 的基部；e 和 g 为匙形，f－1 细长，f－2 短小。内侧感觉毛 a′长度可达 t－2 的基部，缺 b′－1，b′－2 和 c′细棒形。中跗节长 52～58 μm，爪长 13～16 μm；后跗节长 60～72 μm，爪长 16～21 μm。后胸气孔直径 10.3～13.4 μm。雌性外生殖器上的头片直立状，端阴刺细长。腹部背板第Ⅰ～Ⅵ节后排毛序有 P1′和 P1″，P1″短小紧靠 P2，而第Ⅶ节只有 P1′，短小紧靠 P2。胸、腹部毛序见表 6。

表 6　瑞丽古蚖毛序表

Table 6　Chaetotaxy of *E. ruiliense* sp. nov.

	胸部（thorax）			腹部（abdomen）									
	Ⅰ	Ⅱ	Ⅲ	Ⅰ	Ⅱ～Ⅲ	Ⅳ	Ⅴ	Ⅵ	Ⅶ	Ⅷ	Ⅸ～Ⅹ	Ⅺ	Ⅻ
背面（dorsal）	4	6/16	6/16	4/12	10/18	4[1]/18	2[2]/18	2[2]/18	2[2]/16	6/9	8	8	9
腹面（ventral）	6－2/6	6－2/6	8－2/8	4/4	6/4	6/10	6/10	6/10	6/10	0/7	4	8	12

①A4，5；②A5。

全模：2♀♀，1♂，1 LII，云南瑞丽，1992－08－27，肖宁年采；2♀♀，1 mj，云南盈江平原，1992－08－30，肖宁年采；2♀♀，1 LII，云南盈江，1992－09－02，肖宁年采；2♀♀，1♂，云南腾冲古永，1996－04－28，谢荣栋和肖宁年采；1♀，3♂♂，云南高黎贡山，1996－04－29，谢荣栋和肖宁年采。

瑞丽古蚖 *E. ruiliense* 腹部背板第Ⅰ～Ⅵ节后排毛序及雌性外生殖器的头片与 Imadaté 1965 年发表的 *E. paktai* 和 *E. thamnooni* 都不相同。以初产地瑞丽命名。

致　谢　尹文英院士给予指导，肖宁年先生参加标本采集，程义存先生代为复墨，特此致谢。

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SIX NEW SPECIES OF *Eosentomon* FROM YUNNAN, CHINA
(Protura: Eosentomata)

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Abstract: Six new species of *Eosentomon*, namely: *E. gaoligongense*, *E. nujiangense*, *E. zixiensis*, *E. luquanense*, *E. yingjiangense* and *E. ruiliense*, were described in this paper. All the specimens are preserved in Shanghai Institute of Entomology, the Chinese Academy of Science.

1 ***Eosentomon gaoligongense*** **sp. nov.** (Fig. 1: A – E)

Body length 990 – 1 030 μm. Head 124 – 128 μm long. Pseudoculus ovoid and 12.4 μm long, PR = 10.0 – 10.3. Foretarsus 95 – 99 μm longand claw 18 – 20 μm, TR = 5.0 – 5.3; EU = 0.9 – 1.0. Dorsal sensilla *t* – 1 claviform, BS = 1.0; *t* – 2 thin and long; *t* – 3 thin and long but shorter than *t* – 2. Exterior sensilla *a* clubform, little broad in its mid – part; *c* short clubform, *b* long willow – leaf like, *d* long clubform with its tip surpassing the base of *g*; *e* and g spatulated, *f* – 1 small willow-leaf like, *f* – 2 broad short. Interior sensilla *a*' long willow-leaf like, *b*' – 1 and *b*' – 2 short clubform, *c*' short clubform too, little broad in its mid-part. Midtarsus 44 μm long and claw 11 μm; hind-tarsus 57 μm long and claw 13 μm. The diameter of the spiracles 9.3 μm. On female squama genitalis, the caput processus shaped like duck's head and the filum precessus sharp. Chaetotaxy as shown in Table 1.

Syntype: 1 ♀, 2 ♂♂, Mts. Gaoligongshan, Yunnan, 29 – Ⅳ – 1996, collected by XIE Rong-Dong and XIAO Ning-Nian.

Remarks: On tergites Ⅴ – Ⅶ of *E. gaoligongense* each with 3 pairs of anterior setae (A1, 4, 5), which is different from that of other species of *Eosentomon*. The species name is derived from Mts. Gaoligongshan.

2 ***Eosentomon nujiangense*** **sp. nov.** (Fig. 1: F – J)

Body length 1 350 μm. Head 148 μm × 124 μm. Pseudoculus ovoid with a inner globule, 16 μm long, PR = 9.3. Foretarsus 106 μm long and claw 25 μm, TR = 4.2; EU = 0.96. Dorsal sensilla *t* – 1 claviform, BS = 1.1; *t* – 2 thin and long; *t* – 3 thin and long with its tip reaching the base of the claw. Exterior sensilla *a* and *c* short clubform, little broad in their mid-parts; *b* long willow-leaf like, *d* thin and short, e and g spatulated, *f* – 1 short clubform, *f* – 2 very short. Interior sensilla *a*' long willow-leaf like, *b*' – 1 and *c*' thin and short, about the same length with d; *b*' – 2 thin and long with its tip surpassing the base of *c*'. Midtarsus 57 μm long and claw 14 μm; hind-tarsus 67 μm long and claw 17 μm. The diameter of the spiracles 12.4 μm. On female squama genitalis, the caput processus shaped like plane duck's head and the filum precessus thin and long. Chaetotaxy as shown in Table 2.

Holotype: 1 ♀, 1 mj, Mts. Gaoligongshan, Yunnan, 25 – Ⅳ – 1996, collected by XIE Rong-Dong and XIAO Ning-Nian.

Remarks: The chaetotaxy of abdominal tergites of *E. nujiangense* is similar to that of *E. bannaense* Yin, Xie and Imadaté 1995, but its body size is much larger, and foretarsal sensilla *a*', *d*, *t* – 3, *f* – 1, and female squama genitalis are different from that of *E. bannaense*. The name of the present new species is derived from the River of Nujiang, where near the collecting site.

3 ***Eosentomon zixiensis*** **sp. nov.** (Fig. 2: A – E)

Body length 780 – 1 040 μm. Head 113 – 126 μm long. Pseudoculus ovoid, with median striae and three inner globules, 10 – 12 μm long, PR = 10.5 – 11.3. Foretarsus 86 – 90 μm long and claw 18 μm, TR = 4.8 – 5.0; EU = 0.94 – 1.0. Dorsal sensilla *t* – 1 claviform, BS = 0.9 – 1.0; *t* – 2 thin and long; *t* – 3 short clubform. Exterior sensilla *a* short clubform, *b* thin and long; *c* clubform, about the same length with *a*, but it broad than *a*; *d* thin and long with its tip surpassing the base of *t* – 3; *e* and *g* spatulated, *f* – 1 thin willow-leaf like, *f* – 2 short broad. Interior sensilla *a*' thin and long, *b*' – 1 clubform, *b*' – 2 thin and long, *c*' broad than *b*' – 1. Midtarsus 41 – 45 μm long and claw 12.4 μm; hind-tarsus 48 – 57 μm long and claw 13.4 – 14.4 μm. The diameter of the spiracles 9.3 – 10.3 μm. On female squama genitalis, the caput processus shaped like duck's head and the filum precessus short and sharp. Chaetotaxy as shown in Table 3.

Syntype: 1 ♀, Zixishan, Chuxiong, Yunnan, 15 – Ⅴ – 1996, collected by XIAO Ning-Nian; 3 ♀, ditto, 16 – Ⅴ – 1996, collected by XIAO Ning-Nian.

Remarks: The chaetotaxy of abdominal tergites of *E. zixiensis* is the same as that of *E. pasohense* Imadaté 1976 of Malaysia, but the female squama genitalis is different. And its foretarsal sensilla *c* about the same length with *a*, but broader than *a*. The name of the present new species is derived from Zixishan.

4 *Eosentomon luquanense* sp. nov. (Fig. 2: F – I)

Body length 933 μm. Head 119 μm × 95 μm. Pseudoculus 11 μm long, PR = 10.8. Foretarsus 87 μm long and claw 18 μm, TR = 4.8; EU = 1.0. Dorsal sensilla $t-1$ claviform, BS = 1.0; $t-2$ thin and small; $t-3$ broad and long with its tip near the base of claw. Exterior sensilla *a* and *c* about the same length, they all thin and small; *b* thin and long willow-leaf like, *d* clubform, *e* and *g* spatulated, $f-1$ thin willow-leaf like, $f-2$ very short. Interior sensilla a' broad willow-leaf like, $b'-1$ absent, $b'-2$ thin and very short, c' clubform about half length with $t-3$. Midtarsus 41 μm long and claw 11 μm; hind-tarsus 47 μm long and claw 12 μm. The diameter of the spiracles 8.2 μm. On female squama genitalis, the caput processus very thin and curved opposite each other, and the filum precessus broad and long. Chaetotaxy as shown in Table 4.

Holotype: 1♀, Zhuanlong, Luquan, Yunnan, 20 – Ⅶ – 1994, collected by XIAO Ning-Nian.

Remarks: The chaetotaxy and the female squama genitalis of *E. luquanense* are different from that of other species of *Eosentomon*. The species name is derived from Luquan, where is the collecting site of this new species.

5 *Eosentomon yingjiangense* sp. nov. (Fig. 3: A – C)

Body length 1 089 μm. Head 115 μm × 98 μm. Pseudoculus 15.5 μm long, PR = 7.4. Foretarsus 94 μm long and claw 21 μm, TR = 4.5; EU = 0.95. Dorsal sensilla $t-1$ claviform, BS = 1.0; $t-2$ thin and long, its tip surpass the base of $t-3$, $t-3$ broad clubform. Exterior sensilla *a* and *c* clubform, about the same length; *b* thin and long, *d* broad clubform, its tip just arrive the base of $t-3$; *e* and *g* spatulated, $f-1$ willow-leaf like, $f-2$ very short. Interior sensilla a' and $b'-2$ thin and long, about the same length with $t-2$, with the tip of a' reaching the base of $t-2$, $b'-1$ absent, c' short and broad. Midtarsus 48 μm long and claw 11 μm; hind-tarsus 57 μm long and claw 16 μm. The diameter of the spiracles 9.3 μm. Chaetotaxy as shown in Table 5.

Holotype: 1♂, Pingyuan, Yingjiang, Yunnan, 30 – Ⅷ – 1992, collected by XIAO Ning-Nian.

Remarks: On tergites Ⅳ of *E. yingjiangense* with 3 pairs of anterior setae (A2, 4, 5), Ⅴ with 2 pairs (A4, 5), Ⅵ and Ⅶ every with 1 pairs (A5). Foretarsal sensilla $b'-1$ absent. The species name is derived from Yingjiang, the collecting site of this new species.

6 *Eosentom ruiliense* sp. nov. (Fig. 3: D – G)

Body length 1 058 – 1 140 μm. Head (134 – 147) μm × (98 – 114) μm. Pseudoculus 18 – 22 μm, PR = 6.2 – 8.0. Foretarsus 103 – 113 μm long and claw 23 – 26 μm, TR = 4.3 – 4.9; EU = 0.9 – 0.96. Dorsal sensilla $t-1$ claviform, BS = 1.0 – 1.2; $t-2$ thin and long; $t-3$ broad clubform with its tip near the base of claw. Exterior sensilla *a* and *c* very thin, about the same length, *b* thin and long, *d* broad clubform, its tip surpass the base of $t-3$; *e* and *g* spatulated, $f-1$ thin and long, $f-2$ very short. Interior sensilla a' with its tip reaching the base of $t-2$, $b'-1$ absent, $b'-2$ and c' thin clubform. Midtarsus 52 – 58 μm long and claw 13 – 16 μm; hind-tarsus 60 – 72 μm long and claw 16 – 21 μm. The diameter of the spiracles 10.3 – 13.4 μm. On female squama genitalis, the caput processus straighten and the filum precessus thin and long. Chaetotaxy of abdomen tergites Ⅰ – Ⅵ with P1′ and P1″, P1″ very short near to P2, but on tertgite Ⅶ only with P1′ near to P2 too. The chaetotaxy as shown in Table 6.

Syntype: 2♀♀, 1♂, 1 LII, Ruili, Yunnan, 27 – Ⅷ – 1992, collected by XIAO Ning-Nian; 2♀♀, 1 mj, Pingyuan, Yingjiang, Yunnan, 30 – Ⅷ – 1992, collected by XIAO Ning-Nian; 2♀♀, 1 LII, Yingjiang, Yunnan, 2 – Ⅸ – 1992, collected by XIAO Ning-Nian; 2♀♀, 1♂, Guyong, Tengchong, Yunnan, 28 – Ⅳ – 1996, collected by XIE Rong-Dong and XIAO Ning-Nian; 1♀, 3♂♂, Mts. Gaoligongshan, Yunnan, 29 – Ⅳ – 1996, collected by XIE Rong-Dong and XIAO Ning-Nian.

Remarks: Tergites Ⅰ – Ⅵ with posterior setae P1′ and P1″ separately and female squama genitalis of *E. ruiliense* are different from that of *E. paktai* Imadaté 1965 and *E. thamnooni* Imadaté 1965. The new species name is derived from the primary collecting site Ruili.

Key words: Protura; Eosentomata; *Eosentomon*; Yunnan